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Noblesse Oblige

Noblesse oblige! These two words are a condensed expression of a code of conduct appropriate for those of noble birth. This code is not defined in statutes, nor does it consist of a set of commandments, nor is it even a group of unwritten laws. It has higher authority than statutes or commandments or customs. It is the inner light that must be followed, though its only reward is the satisfaction of being worthy of the opportunities for noble actions that life presents.

There is a noblesse oblige for scientists, for they occupy lofty stations in life. Almost from childhood they are specially favored by Fortune. As a rule they are educated largely at public expense. Even when they have risen from poverty and obscurity, they have traveled roads that other men have smoothed. At the summit they lead relatively sheltered lives. They have leisure and opportunities to become familiar with the thoughts and deeds of the heroes of the race.

In stable periods scientists and other scholars properly continue to add to their knowledge and to increase their wisdom. But when the storms of war or revolution threaten freedom, noblesse oblige demands that they play other and more strenuous roles. It demands that they dedicate their knowledge to the service of society without thought of possible rewards. It demands that they stand ready to give up comforts and privileges, and even life, if such a sacrifice may contribute to the common good.

Noblesse oblige asks no favors for scientists in time of war on the ground that at some future time they may contribute greatly to human welfare. It even spurns the theory that any blood

is so blue that it must not be shed or any life so precious that it must be preserved at the risk of disaster to the many. This is not a new standard of values, for it would be difficult to find in all history an example, from the Cross to Bataan, in which it is the judgment of mankind that the self-sacrifice of a human life had better not have been made. The world is enriched by countless shrines in honor of those who died in obedience to an inner light.

It is not often, however, that heroic actions are required. More often foresight, clear thinking, prompt action and tireless persistence are the qualities through which noblesse oblige finds most effective expression. Scientists have made an envious record in national emergencies. The National Academy of Sciences was organized and incorporated by an act of Congress in 1863, during the dark days of the Civil War, with the provision in its Charter that it shall serve the nation without compensation. The National Advisory Committee for Aeronautics was established by an act of Congress in 1915, and the National Research Council by President Wilson in 1916. At the present time nearly 250 of the most eminent American scientists are serving without remuneration on advisory committees of the National Academy of Sciences and the National Research Council.

Long before the United States entered the present world war American scientists saw the storms coming and began organizing for action. Nearly two years before Pearl Harbor they drew up plans for the National Defense Research Committee and the Committee on Medical Research which President Roosevelt made effective by executive orders in the summer of 1940. The civilian members of these agencies, the section chairmen, and even the members and consultants are not paid from public funds. The scientists in these agencies know the scientific problems that are important in national defense, who the experts are in the various fields and where the necessary investigations can be most effectively carried out. They have not asked Congress for hundreds of millions and billions of dollars. In-

stead, they have gone to the laboratories of educational institutions and of industries, availing themselves with rare business acumen of the facilities with which their problems can be most economically and expeditiously solved. In the ranks of this silent and effective army there are about 500 of the leading scientists of this country, who, in response to noblesse oblige, are toiling to the very limits of their endurance, undergoing severe disruptions of their lives and in many cases facing serious dangers.

What has so far been accomplished by scientists is but a pattern for greater things that remain to be done, many of them in wholly different fields. The most obvious task immediately ahead is that of providing scientific training in educational institutions for those who will be required in aviation, nutrition and sanitation. But equally important and more difficult ones will arise after the conflagration now sweeping over the world shall have burned out, for then new economic, social and political structures will have to be erected out of the ashes that remain. Then will come the opportunity for those who have obtained wisdom from reflecting upon the vicissitudes experienced by the life that has been upon the earth, not only the life of recorded human history but also that of the myriads of creatures that bridge the gulf between the lowest forms and man. For the present these problems of reconstruction may rest in the vestibules of the minds of scientists and educators, awaiting another clear call of noblesse oblige that will surely come when the world's fever subsides.—F. R. M.

Emergency Committee on Plant Disease Problems

At the annual meeting held in Dallas, Texas, December 28 to January 1, last, The American Phytopathological Society, an affiliated society, appointed a War Emergency Committee to deal with plant-disease problems arising out of the war emergency. The committee has an executive board consisting of E. C. Stakman, University of Minnesota, Chairman, J. G. Leach, West Virginia University, and R. P. White, Washington, D. C. Six other members serve as regional representatives as follows: J. G. Horsfall, New England; R. S. Kirby, Middle Atlantic; G. M. Armstrong, Southern; I. E. Melhus, North Central; Max Gardner, Pacific; and F. J. Greaney, Canada. Other members of the committees are H. P. Barss, R. J. Haskell, W. A. McCubbin and J. G. Adams. L. M. Hutchins, President, and C. C. Allison, Secretary, of the Society are members

ex officio. The following problems are among the most important facing the committee at the present time:

1. Threatened shortages of fungicides for plant disease control.
2. More effective quarantine service to prevent introduction of new destructive diseases following changes in international commerce brought about by the war.
3. More effective plant disease surveys to insure discovery of new diseases or incipient epidemics so that control measures may be applied promptly.
4. More effective use of existing information on plant disease control by an expanded extension program.
5. Better control of plant diseases by increased use of seed certification.
6. Readjustment of research programs to meet war needs without jeopardizing basic long-time programs.
7. The prevention of food spoilage in transit and storage and the reduction of deterioration of fabrics, cordage, leather, timber, etc., in connection with military and naval activities.

Strange as it may seem, those materials most valuable in fighting plant diseases are among those most needed for fighting enemy soldiers. These important materials are copper, mercury, chlorine, formaldehyde, zinc, etc. A study of spray dosages has shown that much of these materials can be saved without serious danger of poor control by using weaker concentrations and, in some cases, by decreasing the number of applications. A nation-wide cooperative research project is being organized for the testing of new or substitute fungicides that could be used safely in place of chemicals needed in the production of arms.

Shifts in imports brought about by war conditions increase the probability of importing new diseases. For example, wheat was imported from Australia, presumably for reshipment, but some was used for planting, permitting the destructive flag smut to become established for the first time in North America. Similar situations might arise if quarantine restrictions were relaxed in the present emergency. Furthermore, if new diseases are introduced it is important that they be discovered before they become so thoroughly entrenched that eradication or effective control is impossible or difficult.

There is always a considerable lag period after a new discovery is made before it reaches practical application. Losses from plant diseases could be greatly reduced if the existing knowledge were

effectively applied. To this end research plant pathologists are being urged to clean their shelves of unpublished data and to publish all available information in a form readily available to the farmer or to the extension worker who advises him. Increased emphasis on extension work is being urged. At the present time only 23 of the 48 states employ extension specialists in plant disease control.—J. G. LEACH.

Colloid Symposium

The Nineteenth Colloid Symposium held under the auspices of the Committee of Colloid Science of the National Research Council and the Colloid Symposium Committee of the American Chemical Society, the latter an affiliated society, will be held this year in Boulder, Colo., June 18 to 20. Information regarding the symposium may be obtained from Dr. Frank E. E. Germann, University of Colorado. The following is the complete program:

I. APPARATUS AND TECHNIQUES

1. A Method of Capillary Fluorescence Analysis Employing a Balanced Photoelectric Circuit. Frank E. E. Germann and C. W. McLenathen, University of Colorado.
2. The Theory and Applications of a Two-Path Rectangular Micro-Electrophoresis Cell. Herman Benjamins, University of Colorado.
3. Applications of the Electron Microscope in Colloid Chemistry. Ladislaus Marton, Stanford University.

II. INORGANIC COLLOID CHEMISTRY

4. The Nature of Colloidal Clay as Revealed by the Electron Microscope. Byron T. Shaw, Ohio State University.
5. Studies on Clays. E. H. Hauser, Massachusetts Institute of Technology.
6. Adsorption at Crystal-Solution Interfaces: An Electron Diffraction Study of Crystal Faces of Sodium Bromate with and without Adsorbed Dyes. John H. Blomquist and Wesley G. France, Ohio State University.
7. The Elimination of Sorption-Desorption Hysteresis. Harry B. Weiser, W. O. Milligan, and W. C. Simpson, The Rice Institute.
8. Adsorption of Propane and Propylene by Silica Gel and Metallized Silica Gel. L. H. Reyerson and Martin Cines, University of Minnesota.
9. Surface Conditions of Precipitates and Rate of Reaction. VI. T. H. James, Eastman Kodak Company.

III. COLLOIDAL ELECTROLYTES

10. Migration Data in Solutions of a Colloidal Electrolyte, Lauryl Sulfonic Acid. M. E. L. McBain, Stanford University.
11. Osmotic Properties of Solutions of Typical Colloidal Electrolytes. James W. McBrain, Stanford University.
12. Rheological Properties of Soap Systems. Robert D. Vold and Luther L. Lyon, University of Southern California.

13. Surface Tension of Micelle-Forming Solutions. Hans M. Cassel, Chicago.

IV. PROTEIN CHEMISTRY

14. Protein Films. G. E. Boyd and W. D. Harkins, University of Chicago.
15. Properties of Bi-Molecular Protein Membranes. R. B. Dean, Stanford University.
16. Physical Properties of Living Matter. Charles H. Norris, University of Colorado.
17. Normal Variation in the Concentration of Fibrinogen, Albumin, and Globulin in Blood Plasma. Robert M. Hill, University of Colorado School of Medicine.
18. Electrophoretic and Ultracentrifugal Analysis of Hay Fever Producing Components of Grass Pollen Extracts. H. A. Abramson, D. H. Moore, and H. H. Gettner, Columbia University.
19. Problems of Chromatography in Colloid Chemistry Illustrated by Leaf Pigments. Harold H. Strain, Carnegie Institution of Washington.
20. The Albumin Fraction of Soybean Protein. William G. Smiley and Allan K. Smith, U. S. Department of Agriculture.
21. The Electroviscous Effect. David R. Briggs, University of Minnesota.
22. A Study of the Diffusion Velocity of Ovalbumin in Relation to its Molecular Weight. Leo Friedman and B. Roger Ray, Oregon State College.

Page County Nutritional Program

Page County is a typical rural Virginia county. This article explains the methods which are being used to reach the people of the county with the "Food for Freedom, Garden and Nutrition" programs. Perhaps it will suggest ways in which the Association can participate in Dr. Wilson's nutrition work.

Page County's farm people firmly believe that food is an important implement of war. They believe that if we are to win this war the soldiers and civilians must be adequately fed. They are fully aware of the fact that if farm families are to be fed adequately most of the food must be produced on their own farms. They don't mind the labor involved if the food they grow will make strong bodies full of the courage needed to assure victory.

Nothing is taken for granted or left to chance that can be planned properly to secure larger and better gardens and proper use of the food produced on the farms. The first step, taken early in 1940, was to set up a county-wide organization of neighborhood leaders. All information for improving the efficiency of the farm people is now being disseminated through these trained local leaders who have voluntarily accepted the responsibility of helping their neighbors.

This organization was brought into being by the election of community committeemen and the appointment of neighborhood men and women to

serve as leaders in every locality in the county. These committeemen helped in the preparation of a land-class map and in the outlining of the boundaries for neighborhoods and communities. The community committeemen then secured the help of neighborhood leaders in listing, locating, and numbering every farm family by neighborhoods on a map of the county. By this process it has been possible to develop a check-off list for each family for the various jobs necessary to be done. For example, in the Victory Garden work after a neighborhood leader has listed and spotted his farm neighbors, the County agricultural office makes several copies of the list, leaving space for check-off columns for the work to be done. The first column to be checked under victory garden is headed "manuring, fertilizing and plowing"; the second, "planting"; the third, "successive planting"; the fourth, "conservation"; and the fifth, "saving of seed." As the different jobs are finished by each family, neighborhood leaders check the jobs done on their neighborhood listing sheets. When a family gets behind with a job other forces, such as community committeemen and agricultural agency workers, help the family catch up on its work. By this method no family will get far behind and a nearly 100 per cent garden production for victory will result.

Neighborhood leaders do their job without making special farm visits other than those they normally would make in neighborliness. These leaders assist their neighbors in the location of their gardens and in the preparation of the soils for planting. Leaders frequently sow more seeds for plants than they need and either sell or give the surplus to their neighbors. A good selection of leafy, fruit, and root vegetables is made along with advice on control of diseases and insects. Advice will be given later as to successive plantings and as to the canning, drying and storing of vegetables for winter use.

The same organization is being used in securing better nutrition for the people of Page County. This is done by holding leader training meetings and then having demonstrations in farm homes in every neighborhood in the county. The nutritional program embraces the school lunch program, special programs for youth in their organizations and personal work by agency workers in various fields. It is being carried forward systematically under the following four general headings:

Better living from the farm by the production of food for home use.

Nutrition for health and efficiency.

Increased production of food for defense.

Use of organizations and means of publicity already set up in the county.

Each of these general headings is divided into subordinate topics depending on subject matter, time of action required, families to be assisted, organizations and individuals to give service, and means of reaching those concerned. For example, under the first general heading such topics are to be considered as plans for growing food, preserving it by various methods, and exchanging it with others to meet deficiencies.

The spirit of victory pervades the community. It will not be a case of too little and too late in this county where the program is under the leadership of farm men and women in their county board of agriculture. Success is being achieved, first, by the perfection of an organization which touches personally every home and person in the county and, second, by the use of the organization in getting every job done.—GARLAND H. CLARK, County Agent.

The New York Meeting

As has been previously announced, the next annual meeting will be held in New York City from December 28, 1942, to January 2, 1943. This will be the sixth meeting to have been held in New York City, the last one occurring in 1928. At that meeting 61 sections and societies met with the Association and the program listed altogether 2,200 titles of papers to be presented at the various sessions. The registration was 3,935, although it was estimated that over 5,000 persons attended the meeting. About 40 organizations, exclusive of Sections, have announced that New York City will be their next meeting place and that their sessions will be in conjunction with the meeting of the Association.

Several details of the arrangements of general importance have already been completed. The address of the Retiring President, Doctor Irving Langmuir, will be delivered Monday, December 28, 1942, at 8:30 P.M. in the Ballroom of the Waldorf-Astoria Hotel. Two hotels will serve jointly as the general headquarters for the Association, namely, the Hotel Pennsylvania, located in the Pennsylvania Railroad Station zone, and the Hotel Commodore, located in the Grand Central Railroad Station zone. A number of the well-known hotels located in the zones above mentioned, in addition to the Hotel Pennsylvania and the Hotel Commodore, will serve as headquarters for the various sections and societies.

Registration offices will be in operation in the

Commodore and Pennsylvania Hotels. The Science Exhibition will be housed in the Ballroom of the Commodore.

Announcements of assignments of section and society hotel headquarters, meeting rooms, programs, and other general details will appear in later numbers of the A.A.A.S. Bulletin.—S. W.

Celebration of the Torrey Botanical Club

The Torrey Botanical Club will celebrate the 75th Anniversary of its founding during the week of June 22, 1942, in New York City. Invitations are going forward to botanical societies and university departments in this country and the non-axis countries of the world requesting the appointment of delegates to the ceremonies. Tentative plans include a series of symposia with invited speakers on morphological, physiological, ecological, phytopathological and taxonomic subjects. Visits will be conducted to institutions of botanical interest in the metropolitan area. The Field Committee of the Club is arranging excursions in the vicinity as part of the program. Prof. John S. Karling, of Columbia University, is in charge of the celebration.

Since the cancellation of the Ann Arbor meeting, the Ecological Society of America has accepted an invitation to join the Torrey Botanical Club in its 75th Anniversary celebration. There will be no formal meeting or program by the Ecological Society, but all members of the Society who will be in the vicinity are urged to attend. Further details will be published in the June Bulletin of the Ecological Society.

The AAAS-Gibson Island Conferences

In the April issue of the A.A.A.S. BULLETIN the programs of three AAAS-Gibson Island Research Conferences for the following summer were given in full.¹ The complete programs of three more of the ten conferences are as follows:

ORGANIC HIGH MOLECULAR WEIGHT COMPOUNDS

Chairman: S. S. Kistler, Research Department, Norton Company.

Vice chairman: H. Mark, Brooklyn Polytechnic Institute.

July 6

Nature, Direction and Magnitude of Forces between Molecules. J. C. Slater, Mass. Institute of Technology.

¹ Inadvertently the address of Dr. C. V. Smythe, who will present a paper on June 25, was given as the Rockefeller Institute instead of the University of Pittsburgh, his present address. Also, the correct title of the paper by G. O. Doak is "Aromatic Arsine Oxides." Dr. Doak is associated with the U. S. Public Health Service.

Interfacial Force Phenomena. Irving Langmuir, The General Electric Company.

July 7

Experimental Aspects of Adhesions to Metals. G. H. Young, Mellon Institute.

Structural Aspects of Adhesion and Cohesion. Otto Beek, Shell Development Company.

July 8

Structural Aspects of Adhesion and Cohesion. H. Mark, Brooklyn Polytechnic Institute.

Distribution of Molecular Sizes in Organic Polymers. J. G. McNally.

July 9

Condensation Polymerization. P. J. Flory, E. I. duPont de Nemours and Company.

Theory of Vinyl Type Polymerization. F. K. Schoenfeld, B. F. Goodrich Company.

VITAMINS

Chairman: Walter C. Russell, Rutgers University.

Vice chairman: R. Adams Dutcher, Pennsylvania State College.

July 20

Multiple Nature of Vitamin A. Norriss Embree, Eastman Kodak Company.

Physiological Role of Vitamin A.

Present Status of the Vitamin D Problem. James Waddell, E. I. duPont de Nemours and Company.

July 21

Choline in Nutrition.

Newer Members of the Vitamin B Complex. D. W. Woolley, Rockefeller Institute for Medical Research.

Water-soluble Vitamins in Cell Metabolism.

July 22

Chemistry and Functions of Biotin.

Fatty Acids and their Relation to Members of the Vitamin B Group. E. W. McHenry, University of Toronto and Connaught Laboratories.

National Nutrition Program. W. H. Sebrell. National Institute of Health.

July 23

Riboflavin Assay Methods. J. S. Andrews, Research Laboratories, General Mills.

Pathophysiology of Vitamin Deficiencies. Roy L. Swank, Peter Bent Brigham Hospital.

Methods Used in Detection of Malnutrition. L. B. Youmans.

July 24

Therapeutic Measures in Vitamin Deficiencies. Norman Joliffe, Bellevue Hospital.

Experimental Vitamin B Group Deficiencies in Swine. M. M. Wintrobe, Johns Hopkins University.

CHEMICAL GROWTH PROMOTERS

Chairman: E. S. Cook, Institutum Divi Thomae.

Vice chairman: Dean Burk, National Institute of Health.

August 17

- Effect of Bios on Growth and Metabolism of Yeast. C. N. Frey, Fleischmann Laboratories.
Nicotinic Acid in Bacterial Metabolism. Felix Saunders, The University of Chicago.

August 18

- Growth Factors for Fungi. V. G. Lilly, West Virginia University.
Growth Factors for Plants. K. V. Thimann, Harvard University.

August 19

- Studies on Fission in Amoeba. H. W. Chalkley, National Cancer Institute.
Amino Acids in Developmental Growth of Obelia. F. S. Hammett, Lankeman Hospital Research Institute.

August 20

- Injury and Production of Growth Promoters: Wound Hormones. E. S. Cook, Institutum Divi Thomae.
Chemistry of Plant Wound Hormones. James English, Jr., Yale University.
Factors Influencing Wound Healing. A. D. Holmes, E. L. Patch Company.

August 21

- Biotin in Metabolism, Growth and Cancer. Dean Burk, National Institute of Health.
Endogenous Factors in Tumor Development. Albert Claude, Rockefeller Institute for Medical Research.

Further information regarding the conferences for the coming summer can be obtained from Dr. Neil E. Gordon, Director, Central College, Fayette, Mo.

War Committee on Bacteriology

The Society of American Bacteriologists, an affiliated society of the Association, has appointed the following War Committee on Bacteriology: Drs. T. M. Rivers (Chairman), R. E. Buchanan, E. J. Cameron, E. B. Fred and N. P. Hudson. In addition, Dr. S. A. Waksman, president of the society, and Dr. W. B. Sarles, secretary-treasurer, are *ex officio* members of the Committee.

In a "news letter" to members of the society, President Waksman wrote as follows:

Bacteriology will be called upon to play an important role in the present national emergency. It is hardly necessary to list for the members of this society the numerous activities of bacteria, yeasts, molds and other microorganisms which will find application in the control of health and disease, of sanitation and epidemics, in agriculture and in food production, as well as in many industries. . . .

. . . The duties of this Committee will be threefold: (1) It will act as a clearing house for research in the fields of Medical, Industrial and Agricultural Bacteriology, as well as in General Microbiology, pertaining to problems of particular importance in prosecution of the

war. (2) It will help to coordinate the activities of various Societies, Committees, Government and Municipal organizations, interested in many aspects of Bacteriology. (3) It will be prepared to advise government agencies, industrial organizations and other duly accredited groups requiring information regarding any branch of Bacteriology and Microbiology, especially on problems related to the war. . . .

This Committee will assist the Chemical, Medical and Biological Sections of the National Research Council, and such other governmental agencies as might wish to use its services. It will aid in the placement of bacteriologists in positions concerned with defense. The Committee is authorized to appoint subcommittees as needed to undertake specific tasks.

Air Force Enlisted Reserve

On April 21, Lieutenant General Henry H. Arnold, Commanding General of the U. S. Army Air Forces, announced a plan for preliminary enlistments of young men as privates in the Air Force Enlisted Reserve while they continue their studies in universities and colleges throughout the country. This plan offers an unparalleled opportunity to educators to participate in war work of the greatest importance. Every day the news from the war fronts emphasizes the vital roles the air services are playing and the disaster that follows the lack of planes and combat crews.

In the early days of the war, it was frequently stated that two years were required to train pilots, navigators and bombardiers. But two years are not available if this country is to provide combat crews for the tens of thousands of planes that will be produced within a few months. Hence the new plan and the call on the educational institutions of the country to make available their plants and their personnel to meet the urgent need for their aid in providing the basic scientific training that combat crews must have. Imperative duty calls them to meet the needs whatever efforts may be required. As General Arnold said, "This need is so imperative that without hesitation the Air Forces are asking for the cooperation of every educator in the United States."

It would be an error to assume that the new plan General Arnold has announced offers any opportunity for young men to avoid for a time the strenuous life that soldiers lead. Only students who maintain satisfactory scholastic records, measured by the severe standards of the Army, will be permitted to continue their academic training until they are required for actual Army training. Moreover, they will be subject to call to active duty at any time. The demand is for students with keen minds, strong muscles and high ambitions, for such young men as have

always flocked to our armies. Those who succeed in their educational work will be appointed Aviation Cadets with an opportunity to compete for commissions as officers in the Air Corps.

It would be equally an error for educational institutions to assume that they are being asked by the Air Corps to undertake an easy task. They must realize that the responsibilities they must carry are heavy and that on their success very much depends. They must not expect assistance from those who are already overburdened; their signal has been called and they must carry the ball.

General Arnold has designated 155 universities and colleges throughout the country as "focal points" in the new program that has been announced. He asked each university and college participating in the plan to appoint a "Faculty Air Forces Adviser to provide a definite contact between the representatives of the Army and the college personnel." These representatives will be kept fully informed of plans and changes in plans and through them the Army will have relationships with the universities and colleges that will facilitate the exchange of information and advice. The plan that has been adopted is substantially one of those recommended by the committee that the Association appointed in January. Consequently it has the full approval and the unlimited support of the Association. For copies of the release by the Air Corps, address War Department, Bureau of Public Relations, Washington, D. C.—F. R. M.

Teachers Rebel

Teachers of Norway have revolted against the Quisling administration. All schools closed early in March and will not be reopened. In consequence of their defiance of the Hitler puppet state, 2000 teachers have been arrested—many of them sent to concentration camps. "The closing of our schools," says Tor Myklebost, Press Attache of the Norwegian government in exile, "is part of our scorched earth policy."

Willard E. Givens, executive Secretary of the National Education Association, an affiliated society of the Association, on behalf of American teachers, sent through secret channels the following message of encouragement to members of the profession in Norway:

... This courageous conduct is an inspiration to the teachers of America who are mobilizing the nation's educational resources to aid in winning a war in which we have the utmost confidence of final victory. Popular government is maintained only by people well enough

educated to govern themselves. The democracies owe much to their teachers and to their educational institutions even in normal times. The last ditch stand of Norwegian teachers in the labor concentration camps in the northern regions of their country to defend democracy in its extremity arouses the admiration of American teachers and impels us to greater war effort. Your colleagues in the United States acclaim your high determination and offer our assurance that it will be remembered in the better days to come as a heroic and praiseworthy act. (From *Capital Comment*, by BELMONT FARLEY, National Education Association.)

Section Affiliations of New Members

Between last October 1, the beginning of the current fiscal year of the Association, and March 11, 1942, 3,022 new names were added to the membership roll of the Association. Never before in a corresponding interval have so many persons become members of the Association.

Each member of the Association has the privilege of being enrolled in one or more sections, the first being the one in which he is most interested. The sectional affiliations of the 3,022 new members, as determined by their first choices of sections, are presented in the following table:

Section	Number	Percentage
Mathematics	76	2.5
Physics	246	8.1
Chemistry	1,097	36.3
Astronomy	20	0.7
Geology and Geography	112	3.7
Zoological Sciences	216	7.1
Botanical Sciences	106	3.5
Anthropology	30	1.0
Psychology	141	4.7
Social and Economic Sciences	62	2.1
Historical and Philological Sciences	33	1.1
Engineering	167	5.5
Medical Sciences	387	12.8
Subsection on Dentistry	39	1.3
Subsection on Pharmacy	30	1.0
Agriculture	65	2.2
Industrial Sciences	15	0.5
Education	128	4.2
No section	52	1.7
Total	3,022	100.0

The increases in the number of new members affiliating with the various sections depends upon several factors, such as the numbers of scientists in the respective fields who are not members of the Association, the activities of the sections, meetings of affiliated societies with the sections, the nominations of persons for membership from the sections, and the invitations to scientists in

various fields to become members of the Association. From year to year the distribution of the affiliations of new members among the sections varies considerably.

Of the 3,022 new members, 1,881, or 62.3 per cent, elected to receive *Science* with their memberships. The remaining 1,141 members, or 37.7 per cent, elected to receive *The Scientific Monthly*. Of the new members, 107, or 3.6 per cent, are receiving both *Science* and *The Scientific Monthly* by paying \$3 per year in addition to their dues to the Association. A considerable number of members who begin their memberships by receiving only one of the two journals later take the other also. Of all the members of the Association, almost 4 per cent receive both *Science* and *The Scientific Monthly*. In addition, there are several cases in which two persons from the same family are members of the Association, one receiving *Science* and the other *The Scientific Monthly*.—F. R. M.

Report on Symposia Publications

Since announcing the symposia volumes in the April number of the A.A.A.S. BULLETIN, the Office of the Permanent Secretary reports that the supply of the volume on Human Malaria is now exhausted. Copies of Syphilis and The Gonococcus and Gonococcal Infection were sold out many months ago. Only about 100 copies of The Cell and Protoplasm are available, but the stocks of the other symposia publications, excepting Liebig and After Liebig which has just come from the press, vary in number from 200 to 300 copies.—S. W.

Government Needs Junior Chemists

The Civil Service Commission is endeavoring to secure a large number of junior chemists to meet the increasing demands made by Federal agencies due to the war effort. Appointments are to be made throughout the United States to positions paying \$2,000 a year. Women especially are needed. The navy yards, arsenals and other Government laboratories are employing women in their chemical work.

No written test is required—applicants' qualifications will be judged from their experience, education, and training. Completion of a 4-year course in a recognized college with 30 semester hours in chemistry is required, but senior students who will complete the required course within 4 months of the date of filing application may apply. No experience is required, although

preference in appointment may be given to applicants showing experience in chemical or related work. Applications will be accepted at the Commission's Washington office until the needs of the service have been met.

Membership in the Association

According to the Constitution, the objects of the Association are to promote intercourse among those who are cultivating science in different parts of America, to cooperate with other scientific societies and institutions, to give a stronger and more general impulse and more systematic direction to scientific research, and to procure for their labors of scientific men increased facilities and a wider usefulness. Members may reside in any country. A person desiring to become a member of the Association should fill in a membership application card that may be obtained from the Office of the Permanent Secretary and return it with his payment for one year's dues (\$5.00). Every member in good standing receives with his membership a subscription for either *Science* or *The Scientific Monthly*. Dues are for the fiscal year that begins October 1; the subscription begins the following calendar year. A member desiring to receive both journals may do so by paying \$3.00 in addition to the regular dues, both subscriptions running concurrently. Members in good standing also receive without extra charge subscriptions to the A.A.A.S. BULLETIN, and they may purchase symposia publications at prepublication and post-publication reduced prices.

A person who pays \$100 may be elected a life member; sustaining members pay \$1,000. Both classes are exempt from the payment of further dues but are entitled to all the privileges of membership.

An incorporated scientific society or institution or a public or incorporated library may become a member by paying the entrance fee of \$5.00 in addition to the dues. Such institution members are entitled to a subscription for either *Science* or *The Scientific Monthly*, as well as the A.A.A.S. BULLETIN.

Members are encouraged to nominate for membership persons who desire to cooperate in carrying out the objects of the Association. Names may be sent to the Office of the Permanent Secretary at any time. In the letter of invitation to become a member of the Association the name of the person making the nomination is mentioned if that is desired.—S. W.

